

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 2 of 16

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application and reflects the amendment of Claims 20, 24 and 61, the cancellation of Claims 1-19 and 43-60 and the addition of new Claims 65-68.

Listing of Claims:

1.-19. Cancelled.

20. (Currently Amended) A method for producing a hyaluronic acid composition comprising providing eggshell membrane from a mature fowl egg and extracting a hyaluronic acid rich fraction from said eggshell membrane.

21. (Original) A method according to Claim 20, wherein said eggshell membrane contains at least about 0.5 wt % hyaluronic acid.

22. (Original) A method according to Claim 21, wherein said eggshell membrane contains at least about 1 wt% hyaluronic acid.

23. (Original) A method according to Claim 22, wherein said eggshell membrane contains hyaluronic acid in the range of about 1 to about 5 wt%.

24. (Currently Amended) A method according to Claim 20, wherein the step of providing an eggshell membrane comprises the step of further comprising separating said eggshell membrane from the egg yolk, egg white and eggshell prior to the extracting step.

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 3 of 16

25. (Original) A method according to Claim 20, wherein said hyaluronic acid composition contains at least about 80 wt% hyaluronic acid.

26. (Original) A method according to Claim 25, wherein said hyaluronic acid composition contains at least about 90 wt% hyaluronic acid.

27. (Original) A method according to Claim 26, wherein said hyaluronic acid composition contains at least about 95 wt% hyaluronic acid.

28. (Original) A method according to Claim 27, wherein said hyaluronic acid composition is substantially pure hyaluronic acid.

29. (Original) A method according to Claim 20, wherein said hyaluronic acid composition contains hyaluronic acid having an average molecular weight of less than about 1,000,000 daltons.

30. (Original) A method according to Claim 29, wherein said hyaluronic acid composition contains hyaluronic acid having an average molecular weight in the range of from about 50,000 to about 500,000 daltons.

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 4 of 16

31. (Original) A method according to Claim 30, wherein said hyaluronic acid has an average molecular weight in the range from about 50,000 to about 250,000 daltons.

32. (Original) A method according to Claim 29, further comprising modifying the average molecular weight of said hyaluronic acid.

33. (Original) A method according to Claim 32, wherein the molecular weight of said hyaluronic acid is modified by increasing the average molecular weight.

34. (Original) A method according to Claim 33, wherein the average molecular weight of said hyaluronic acid is increased by cross-linking the hyaluronic acid.

35. (Original) A method according to Claim 20, wherein said hyaluronic acid composition comprises hyaluronic acid and at least one other naturally occurring material derived from eggshell membrane selected from the group consisting of a hexosamine, chondroitin sulfate and combinations thereof.

36. (Original) A method according to Claim 35, wherein said hexosamine is selected from the group consisting of N-acetyl-D-glucosamine, N-acetyl-D-galactosamine, a hexose and mixtures thereof.

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 5 of 16

37. (Original) A method according to Claim 35, wherein said hexosamine is present in an amount of at least about 0.05 wt%.

38. (Original) A method according to Claim 37, wherein said hexosamine is present in the range of about 0.5 to about 10 wt %.

39. (Original) A method according to Claim 38, wherein said hexosamine is present in the range of about 0.5 to about 5 wt %.

40. (Original) A method according to Claim 35, wherein said chondroitin sulfate is present in an amount of at least about 0.05 wt%.

41. (Original) A method according to Claim 40, wherein said chondroitin sulfate is present in the range of about 0.5 to about 10 wt %.

42. (Original) A method according to Claim 41, wherein said chondroitin sulfate is present in an amount of at least about 0.5 to about 5 wt %.

43.-60. Cancelled.

61. (Currently Amended) A method for producing a product for use with mammals, said method comprising providing eggshell membrane from a mature fowl egg.

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 6 of 16

extracting a hyaluronic acid rich fraction from said eggshell membrane and incorporating said hyaluronic acid rich fraction in said product for use with mammals.

62. (Previously Presented) A method according to Claim 61, further comprising purifying said hyaluronic acid rich fraction prior to the step of incorporating said fraction in said product.

63. (Previously Presented) A method according to Claim 61, wherein said hyaluronic acid rich fraction comprises hyaluronic acid and at least one other naturally occurring constituent derived from said eggshell membrane selected from the group consisting of a hexosamine, chondroitin sulfate and combinations thereof.

64. (Previously Presented) A method according to Claim 61, wherein said product is selected from the group consisting of a lubricant for use in cosmetics or eye drops, a moisturizing agent for use in cosmetics or eye drops, an orally administered nutraceutical and a locally administered composition for treatment of osteoarthritis.

65. (New) A method according to Claim 61, wherein the step of providing an eggshell membrane comprises the steps of providing mature fowl eggs having an eggshell, egg yolk, egg white and eggshell membrane, in which the eggshell encases the egg yolk, egg white and eggshell membrane, and breaching the eggshell to expose the egg yolk, egg white and eggshell membrane.

Applicant: Long, et al.
Application Serial No.: 10/616,278
Filing Date: July 9, 2003
Docket No.: 1341-2
Reply to Final Office Action mailed October 10, 2004
Page 7 of 16

66. (New) A method according to Claim 61, wherein the step of providing an eggshell membrane comprises the steps of providing cracked eggs having an eggshell and an eggshell membrane attached to the eggshell, and separating the eggshell membrane from the eggshell.

67. (New) A method according to Claim 20, wherein the step of providing an eggshell membrane comprises the steps of providing mature fowl eggs having an eggshell, egg yolk, egg white and eggshell membrane, in which the eggshell encases the egg yolk, egg white and eggshell membrane, and breaching the eggshell to expose the egg yolk, egg white and eggshell membrane.

68. (New) A method according to Claim 20, wherein the step of providing an eggshell membrane comprises the steps of providing cracked eggs having an eggshell and an eggshell membrane attached to the eggshell, and separating the eggshell membrane from the eggshell.